DOCUMENT RESUME

ED 229 962 EC 151 972

AUTHOR Apolloni, Tony; And Others
TITLE The Effects of Project Interdependence.
INSTITUTION Sonoma State Univ., Rohnert Park, CA. California Inst. of Human Services.
SPONS AGENCY California State Dept. of Education, Sacramento. Div. of Special Education.
PUB DATE 30 Sep 82
GRANT 49-03561-3066-82
NOTE 73p.
PUB TYPE Reports - Descriptive (141) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Attitude Change; *Disabilities; *Friendship; High Schools; High School Students; *Learning Activities; *Outdoor Activities; *Peer Relationship; Program Effectiveness; *Self Concept

ABSTRACT

Thirty-six high school students with disabilities and 39 without participated in a 1 week wilderness experience designed to provide opportunities for interaction and cooperation among students. School and community based activities were sponsored after the project to carry over positive effects of the experience. Pre- and posttests on the Tennessee Self Concept Scale and the Peer Attitudes Toward the Handicapped (PATH) scale were completed along with sociograms and student interviews and questionnaires. Comparison of project participants with control Ss revealed that participation in this project resulted in increased positive attitudes toward students with disabilities, immediately after the program and 6 months later. Participants with disabilities showed significant positive improvement in attitudes, self concept, and friendship patterns. Participants without disabilities showed significant increases in choosing disabled peers as friends. Subjective impressions of project participants and their parents were favorable as well. Extensive appendixes include sample questionnaires and tables of performance data. (CL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED229962

THE EFFECTS OF PROJECT INTERDEPENDENCE

Prepared by

Tony Apolloni, Ph.D.

Joan Ruskus, M.A.

George Triest, M.A.

California Institute on Human Services
Sonoma State University
Rohnert Park, CA 94928
(707) 664-2416
ATSS: 568-2416

This study was supported by a grant (#49-03561-3066-82) from the Office of Special Education, California State Department of Education. Findings or conclusions in this report do not reflect the official position of the California State Department of Education nor of the sponsoring agency.

September 30, 1982

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Lalit M Roy

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EXECUTIVE SUMMARY

Project Interdependence began with a week-long shared wilderness experience for students with and without disabilities, termed "Discover Interdependence Week." It was aimed at creating bonds--friendship, positive attitudes, notions of human worth--on the part of high-school-aged participants, and breaking down barriers between students with disabilities and those without on high school campuses. Students from ten high schools statewide, half students with disabilities and half students without disabilities, participated. A host of challenging activities including a ropes course, hikes, tree-planting, and physical and mental exercises that required cooperation were combined to enable students to experience "interdependence." Once the participants returned to their homes, Project Interdependence staff, Special Education Resource Network personnel, and school site volunteers assisted students to develop high school and community-based activities that were aimed at creating positive attitudes toward and accommodations for people with special needs.

The effectiveness of Project Interdependence was evaluated by measuring the attitudes, self-concept, and friendship patterns of project participants immediately prior to Discover Interdependence Week (pre), immediately following it (post), and six months later (second post). The Peer Attitudes Toward the Handicapped Scale, the Tennessee Self-Concept Scale, and a sociogram

were utilized. The attitudes of project participants were compared to those of control students, nondisabled agemates who did not participate in the project. Moreover, project participants, their parents, teachers, and administrators were surveyed to gather qualitative data on the effects of the project.

Project Interdependence was found to be an effective intervention for changing the attitudes, self-concept, and friendship patterns of high school students. Project participants demonstrated more positive attitudes toward students with disabilities than did control students, both immediately following Discover Interdependence Week and six months thereafter. Pretest to second posttest comparisons showed significant positive improvement on the part of project participants with disabilities across all three quantitative measures: attitudes, self-concept, friendship patterns. Similarly, six months following Discover Interdependence Week, project participants without disabilities continued to demonstrate significantly improved attitudes toward students with disabilities and still indicated willingness to select students with disabilities as friends.

Project participants indicated that they learned a great deal about themselves, people with disabilities, and cooperation among people. They felt they had increased their respect for all people and had improved their attitudes toward people with disabilities. Many of the participants indicated that they formed friendships at Discover Interdependence Week that were maintained at their local high schools.

When project participants returned to their schools, many wrote articles on the project for their school and local newspapers. Project Interdependence Clubs met on a weekly or monthly basis to promote school site activities. The students at several schools successfully lobbied for ramps, curb cuts, and accessible bathrooms. Three schools had Disability Awareness Days wherein project students developed activities for other students to improve their attitudes toward persons with special needs. Additionally, a few schools made presentations to PTAs, Community Advisory Councils, and Lions Clubs.

Anecdotal reports of the parents and teachers of project participants revealed that their children became more outgoing, confident, and empathetic toward persons with disabilities. Many individual testimonials dramatized this outcome. Additional research is needed to identify which components of the overall project experience contributed most to attitude change.

Table of Contents

	Page
Executive Summary	i
Introduction	1
Method	2
Intervention	2
Subjects	3
Instruments	4
Attitudes	4
Self Concept	5
Friendship Patterns	6
Data Collection Procedures	7
Pretesting	7
Posttesting	7
Second Posttesting	7
Interviews and Questionnaires	8
Results	8
Effects of Project Interdependence	9
Comparison of Project Students and Non-project Students Immediately after Discover Interdependence Week	9
Comparison of Project Students and Non-project Students Six Months After Discover Interdependence Week	11
Retention Over Time	12
Students with Disabilities	12
Students without Disabilities Who Participated in the Project	15

Students without Disabilities Who did Not Participate in the Project. 17

Summary of Quantitative Results. 18

The Subjective Impressions of Project Participants, School Anchors, and Participants' Parents. 20

School Site Projects 21

Discussion 21

References 24

Appendices

A. ANOVA Immediately after Discover Interdependence Week on PATHS Behavior

B. ANOVA Immediately after Discover Interdependence Week on PATHS Learning

C. ANCOVA Immediately after Discover Interdependence Week on PATHS Total

D. ANOVA Six Months after Discover Interdependence Week on PATHS Physical

E. ANOVA Six Months after Discover Interdependence Week on PATHS Behavior

F. ANOVA Six Months after Discover Interdependence Week on PATHS Learning

G. ANOVA Six Months after Discover Interdependence Week on PATHS Total

H. Students with Disabilities' Retention from Pre to Post on PATHS Subscales

I. Students with Disabilities' Retention from Post to Second Post on PATHS Subscales

J. Students with Disabilities' Retention from Pre to Second Post on PATHS Subscales

K. Students with Disabilities' Retention from Pre to Post on Tennessee Self Concept Subscales

L. Students with Disabilities' Retention from Post to Second Post on Tennessee Self Concept Subscales

M. Students with Disabilities' Retention from Pre to Second Post on Tennessee Self Concept Subscales

N. Project Students without Disabilities' Retention from Pre to Post on PATHS Subscales

O. Project Students Without Disabilities' Retention from Post to Second Post on PATHS Subscales

P. Project Students without Disabilities' Retention from Pre to Second Post on PATHS Subscales

Q. Project Students without Disabilites' Retention from Pre to Post on Tennessee Self Concept Subscales

R. Project Students without Disabilities' Retention from Post to Second Post on Tennessee Self Concept Subscales

S. Project Students without Disabilities' Retention from Pre to Second Post on Tennessee Self Concept Subscales

T. Nonproject Students without Disabilities' Retention from Post to Second Post on PATHS Subscales

U. Project Interdependence Participant Questionnaire

V. Project Interdependence Summary of Anchorperson Evaluations

W. Project Interdependence Parent Questionnaire Summary

X. Student Activities in Project Schools

Introduction

Project Interdependence is a partnership between the Departments of Education, Rehabilitation, Parks and Recreation, the California Conservation Corps, and the private sector. It was begun during the International Year of Disabled Persons as a concrete manifestation of the state's commitment to further the United Nations' principles of "Full Participation and Equality." It brings high school students together from throughout the state, half with disabilities and half without disabilities, in a wilderness camp, Discover Interdependence. The students are trained as change agents and leaders. Once they return to their local schools, the students are assisted to organize activities and local projects which focus on significant areas in their peer world and school curriculum (e.g., sports, recreation, and career futures).

The goals of Project Interdependence are to:

1. Promote the full integration of students with disabilities into all educational settings;
2. Eliminate stereotypes toward people with disabling conditions and build a climate of mutual acceptance;
3. Join school and community resources; and
4. Initiate activities which link students with and without disabilities via cooperative learning and community involvement.

This special study is an evaluation of the effectiveness of the first year of Project Interdependence. It provides summative answers to the following questions:

1. Will the attitudes, self concept, and friendship patterns of students with disabilities and students without disabilities change immediately following participation at Discover Interdependence Week?

2. Will any changes that were observed in the attitudes, self concept, and friendship patterns of students with disabilities and students without disabilities immediately following Discover Interdependence Week still be apparent six months later?

3. What impressions do participants, school anchors (volunteer educators at school sites) and participants' parents express toward the project?

4. What student-initiated activities occurred at school sites as a consequence of the project?

Method

Intervention

Project Interdependence involved two phases. First, 80 students from 10 high schools statewide, half students with disabilities and half students without disabilities, participated at a weeklong wilderness experience, Discover Interdependence. It was held at Jones Gulch YMCA Camp at La Honda from November 20 to 25, 1981. Activities during Discover Interdependence Week provided maximum opportunities for interaction and cooperation between students.

The second phase of the project consisted of activities which were implemented to assure continuity from the wilderness experience back to the students' local schools. School anchors (local school staff) and Department of Rehabilitation counselors helped students to initiate projects in their own schools in

recreation, integrated sports, the sciences, disability awareness, the arts, and careers. These projects were intended to raise students' level of consciousness, provide opportunities for regular education and special education students to interact, and link school and community resources.

Subjects

Ten schools were selected to participate in Project Interdependence by project staff from a list of 22 schools which had Memoranda of Understanding with the Department of Rehabilitation.

Three groups of students (all high school sophomores or juniors) were identified to participate in the evaluation:

1. Project Students with Disabilities. Ten schools and 75 students were selected to participate in Project Interdependence. Thirty-four of the students were male and 40 were female. Thirty-six students had disabilities, defined as students who receive special education services. No data were available on the nature of their disabilities.

2. Project Students Wtihout Disabilities. Thirty-nine students without disabilities from the 10 selected schools were selected to participate. Approximately 50% of the students were male and 50% were female.

3. Nonproject Students without Disabilities. The school anchors for each of the 10 participating schools agreed to randomly select students from their respective schools who did not participate at Discover Interdependence Week. Data were eventually collected on 48 students from 9 such schools. Additionally, a letter from the State Department of Education was sent to the Superintendents and Special Education Directors of the 12 other school districts which met Project Interdependence criteria but did not send students, soliciting their participation in the evaluation. In spite of these letters and repeated phone calls, only one of the 12 school districts agreed to participate in the evaluation. Institute staff were eventually able to secure the participation of two additional high schools. In

the end, a total of 79 control students from 12 high schools were administered PATHS. Of the controls, 55 were males and 24 were females. All of the control subjects were nondisabled.[1]

Instruments

Attitudes. The Peer Attitudes Toward the Handicapped Scale (PATHS) was standardized on 756 students in five states (Bagley & Green, 1981). It consists of 30 short statements describing personal characteristics which are sometimes demonstrated by handicapped students in school settings. Each of the items describes a hypothetical student who is physically impaired, experiencing learning difficulties, or exhibiting behavioral problems.

PATHS takes approximately 15 minutes to complete and may be given on either an individual or a group basis. The readability level of each statement is fourth grade or below. Students are asked to read a description and select an "appropriate" placement from five options for a handicapped peer:

Work with me in My Group
Work in Another Group (with someone else)
Work in No Group (with no other students)
Work Outside of Class (in another class or room)
Stay at Home (and not come to school)

The following is a sample item:

---

[1] Forty-eight of the control subjects were from the same schools as the project participants. Thirty-one were drawn from schools other than those of the participants. A test for differences between the two control subgroups showed no significant differences. Therefore, the subgroups were combined and treated as one control group.

Item 10 Michael is partially deaf in both ears. He wears a hearing aid and has difficulty saying words. His speech sounds different which makes him hard to understand.

This student should work:

In My Group	In Another Group	In No Group	Outside of Class	At Home
5	4	3	2	1

Subscales

Physical (12 items)	This category addresses the areas of exceptionality that are physiological in nature. Conditions such as blindness, deafness, cerebral palsy and heart conditions are included. The specific handicap is usually one that may be easily observed.
Learning (10 items)	This category relates to areas such as poor study skills, difficulty with school subjects, learning rate, fluency in reading, and other learning skills. Moderately serious problems are depicted.
Behavioral (8 items)	In this category the behavior descriptors pertain to serious emotional and psychological difficulties. Student with aggressive behavior in classroom settings are included in this classification.

Self Concept. The Tennessee Self Concept Scale was standardized on high school and college classes that were representative of all social, economic, intellectual, and educational levels (Fitts, 1965). The Self Concept Scale consists of 100 self descriptive statements which the subjects use to portray their own picture of themselves. The scale is self administering and can be used with subjects 12 or older.

Students are asked to read the description and select the appropriate response. Students are given five options for

indicating their response:

Completely False
Mostly False
Partly False and Partly True
Mostly True
Completely True

The Tennessee Self Concept Scale consists of four subscales. These are described below.

Self Criticism: This scale is composed of mildly derogatory statements that most people admit as being true of them. Individuals who deny most of these statements are being defensive and making a deliberate effort to present a favorable picture of themselves.

Identity: These are the "what I am" items. Here individuals describe their basic identity: what they are as they see themselves.

Self Satisfaction: This scale describes the level of self satisfaction or self acceptance individuals feel toward their perceived self.

Behavior: This scale comes from those items that say "This is what I do or this is the way I act." This score measures the individual's perception of his/her own behavior or the way he/she functions.

The Total Self Concept Score: This score reflects individuals' overall level of self esteem. Persons with high scores tend to like themselves, feel that they are persons of value and worth, and have confidence in themselves. Persons with low scores tend to be doubtful about their own worth.

Friendship Patterns. A sociogram was developed to determine friendship patterns among students with and without disabilities. Students were given a list of students from their high schools who participated at Discover Interdependence and asked to put a check mark by the names of the students with whom they would like to eat lunch. Participants could select as few or as many names from the list as they wanted.

Data Collection Procedures

Pretesting. One-half of the students who participated at Discover Interdependence Week were given PATHS and the Tennessee Self Concept Scale when they arrived at the site of Discover Interdependence.[1] All of the students completed the sociogram. They were given as much time as they wanted to complete the instruments and assistance was available from school anchors and facilitators if requested. Instructions for completing the instruments were included on the answer sheet. Students were told not to discuss their answers with other students. Additionally, students were told that their answers were confidential.

Posttesting. Each of the students at Discover Interdependence Week completed the three instruments on the last evening of Discover Interdependence week. Nonproject students with disabilities were administered PATHS in their respective schools between November 13 and December 21, 198 . School anchors coordinated the data collection in project schools. In nonproject schools, a contact person was designated to coordinate the collection of data.

Second Posttest. Data were collected from project students and nonproject students between May 2 and May 10, 1982. Instruments were mailed to the school anchors and to the other

[1]Pretest data were collected from only half of the students to permit an assessment of the effects of testing. A comparison of the post test scores for project participants who experienced pre testing with those who did not provide pretest data indicated no difference between the groups.

school contacts. They were distributed to the students. A project evaluator collected the completed instruments between May 24 and June 3, 1982.

Interviews and Questionnaires

Project students were mailed a questionnaire in January, 1982 asking for descriptive information about Discover Interdependence and their plans for follow-up activities. All 10 school anchors were mailed a questionnaire in January, 1982 asking for descriptive information about the Discover Interdependence Week, and suggestions for improvements. In May, 1982, the parents of project students were mailed a questionnaire asking for their observations about the input of Project Interdependence on their child. Between May 24 and June 3, 1982, meetings were held with the project students, teachers, and interested administrators at nine out of the ten project schools. Project students were asked to describe the nature of the project activities which emanated from Discover Interdependence. The students' descriptions of the project activities were corroborated by interviews with the project staff.

Results

Many types of analyses were performed in the course of this evaluation. The evaluation consisted of the following: three classifications of students--project students with disabilities, project students without disabilities, and

students without disabilities who did not participate in the project; two conditions--participation in the project and nonparticipation in the project; three data points in time --before the project (pre), immediately after the project (post), and six months after the project (second post); and three measures--PATHS, Tennessee Self Concept Scale, and friendship choices, two of which measures have at least four subscales. The analytic permutations of this evaluation design were thus complex. In an effort to simplify and summarize the significant findings, the data were organized into two major analyses: (1) the immediate effects of Discover Interdependence Week, and (2) students' retention levels on measures over time.

In addition to the analyses of quantitative data, an effort was made to summarize (1) the subjective impressions of project participants, school anchors, and the parents of project participants; and (2) the nature and extent of school site activities.

Effects of Project Interdependence

The effects of the project were measured by comparing students who did and did not participate at Discover Interdependence Week, immediately after the week and six months following it. The instrument used to compare groups was PATHS, and the statistical analysis applied was an Analysis of Variance or ANOVA.

Comparison of Project Students and Nonproject Students Immediately After Discover Interdependence Week. The PATHS

subscales were analyzed separately. Results of each are described below:

- PATHS Physical. An ANOVA performed on the posttest scores of the two groups of students (project and nonproject students) did not show any difference between the groups on this one measure. This is explained by the fact that both project and nonproject students had exceptionally positive attitudes toward physical disabilities even before the Discover Interdependence Week, and therefore could not increase their scores that much more with or without exposure to Discover Interdependence.
- PATHS Behavior. An ANOVA performed on the posttest scores of the two groups showed that project students were significantly higher than nonproject students, F (1,114) = 24.87, $p < .001$. (See Appendix A)
- PATHS Learning. An ANOVA performed on this variable showed a significant difference between the groups also, F (1,114) = 29.42, $p < .001$. (See Appendix B)
- PATHS Total. An ANCOVA (Analysis of Covariance) performed on total PATHS showed significant differences between the groups, F (2,116) = 10.91, $p < .001$. (See Appendix C)

To summarize, it can be said that immediately after Discover Interdependence, the students who participated had much higher scores on three out of the four attitude measures

than did nonproject students: PATHS behaviors, PATHS learning, and PATHS total (the most important score).

Comparison of Project Students and Nonproject Students Six Months After Discover Interdependence Week. Six months after the project, students were re-tested (second post) on the attitude measures. These results were even more positive than those obtained immediately after Discover Interdependence week.

- Paths Physical. Project students had significantly higher attitudes on this measure, F (1,113) = 36.40, $p < .001$. (See Appendix D)
- PATHS Behavior. An ANOVA performed on this variable also showed a difference in favor of project students, F (1,113) = 71.78, $p < .001$. (See Appendix E)
- PATHS Learning. Students who participated in the project were much more positive toward students with learning problems, F (1,113) = 66.17, $p < .001$. (See Appendix F)
- PATHS Total. Finally, the compiled total score on PATHS showed a significant difference between the groups, F (1,113) = 78.36, $p < .001$. (See Appendix G)

To summarize these results, it is apparent that after six months had passed the difference between project students and the nonproject students was still as strong as it was immediately after the project. There was one additional difference

after six months: project students had significantly higher attitudes toward students with physical disabilities than non-project students--this was the only variable which was not significant immediately after Discover Interdependence Week.

Retention Over Time

The previous set of analyses yielded evaluation data pertinent to the overall effectiveness of the project. A comparison group who did not participate in the project was utilized for this purpose. Another set of analyses was conducted to determine what happened to each group of students over time --retention.

These analyses will be organized by classification of student group: students with disabilities, students without disabilities who participated in the project, and students without disabilities who did not participate in the project. Each discussion of student groups will break out retention on PATHS, Tennessee Self Concept, and Friendship Choices.

Students with Disabilities. Retention data are summarized for students with disabilities in Table 1. For clarity and ease of presentation, only results of total scores will be shown and discussed when measures include subscales. Subscales data are reported via Appendices.[1] This same procedure will be followed in reporting results for project students without disabilities and nonproject students without disabilities as well.

---

[1]Each total score represents a sum of the subscales that comprise the entire measure.

Table 1

Students with Disabilities' Retention

of Levels on Measures Over Time

Time Comparison	Mean	T Value	DF
Total PATHS			
Pre PATHS	115		
with		.94	18
Post PATHS	120		
Post PATHS	120		
with		6.32***	27
Second Post PATHS	140[1]		
Pre PATHS	116		
with		5.10***	13
Second Post PATHS	144		
Total Tennessee Self Concept			
Pre Self Concept	304		
with		1.46	17
Post Self Concept	315		
Post Self Concept	329		
with		2.31*	29
Second Post Self Concept	358		
Pre Self Concept	303		
with		3.19**	14
Second Post Self Concept	348		
Friendship Choices			
Pre Choices	2.07		
with		1.41	35
Post Choices	2.40		
Post Choices	2.40		
with		3.16**	29
Second Post Choices	3.30		
Pre Choices	2.07		
with		3.73***	29
Second Post Choices	3.30		

* $p < .05$

** $p < .01$

*** $p < .001$

[1]Mean scores for the same test at the same point in time (for example, Second Post PATHS) may vary slightly from comparison to comparison due to different number of cases involved in the analyses.

- Total PATHS. Data were collected at three points in time: before the project (pre), immediately after the Discover Interdependence Week (post), and six months after the Discover Interdependence Week (second post). Three comparisons were made, therefore, to examine retention patterns: pre to post, post to second post, and pre to second post. This series of analyses will be discussed for all measures for all student groups.

  Students with disabilities increased their attitudes toward other students with disabilities consistently across the period of the evaluation. Most of the gains occurred after the project at the time of second posttesting. The pre to post comparison was initially not significant on PATHS total. However, the post to second post comparison was highly significant, t (27) = 6.32, $p < .000$. The overall effect of the project can be seen in the pre to second post comparison which was also highly significant, t (13) = 5.10, $p < .000$. Data on specific subscales of PATHS for students with disabilities appear in Appendices H, I, and J.

- Total Tennessee Self Concept. Students with disabilities followed the same increasing trend on self concept as they did on attitudes. The initial pre to post comparison was not significant, but the post to second post comparison was highly significant, t (29) = 2.31, $p < .03$. The

overall pre to second post comparison was also very positive and significant, t (14) = 3.19, $p < .007$. Data on specific subscales of the Tennessee for students with disabilities appear in Appendices K, L, and M.

- Friendship Choices. Students with disabilities increased their choices of other students with disabilities consistently over the evaluation. The first comparison, pre to post, was not significant, although there was an increase (see Table 1). The post to second post comparison was highly significant, t (29) = 3.16, $p < .004$; and the overall pre to second post comparison was highly significant, t (29) = 3.73, $p < .001$.

Students without Disabilities Who Participated in the Project. Table 2 presents retention data for students without disabilities who participated in the project on all measures. Again, only total scores will be discussed.

- Total PATHS. Students without disabilities underwent dramatic changes pre to post project on PATHS total, t (20) = 6.24, $p < .0001$. This effect diminished slightly six months after Discover Interdependence Week, but when the students were posttested a second time the overall effect of the project was again significant, t (16) = 3.39, $p < .004$. The data on subscales of PATHS for project students without disabilities appear in Appendices N, O, and P.

Project Students without Disabilities'

Retention of Levels on Measures Over Time

Time Comparison	Mean	T Value	DF
Total PATHS			
Pre PATHS with Post PATHS	108 128	6.24***	20
Post PATHS with Second Post PATHS	128 125	.67	29
Pre PATHS with Second Post PATHS[1]	108 123	3.39**	16
Total Tennessee Self Concept			
Pre Self Concept with Post Self Concept	302 302	.11	16
Post Self Concept with Second Post Self Concept	301 292	1.05	29
Pre Self Concept with Second Post Self Concept	303 296	1.54	12
Friendship Choices			
Pre Choices with Post Choices	3.03 3.45	2.90**	38
Post Choices with Second Post Choices	3.45 3.68	.88	30
Pre Choices with Second Post Choices	3.03 3.68	2.16*	30

* $p < .05$

** $p < .01$

*** $p < .001$

[1]Mean scores for the same test at the same point in time (for example, Second Post PATHS) may vary slightly from comparison to comparison due to different number of cases involved in the analyses.

- Tennessee Self Concept. The results of self concept data are not as striking as the attitude data for students without disabilities. None of the pre to post or post to second post comparisons were significant. The self concept of students without disabilities was relatively unaffected by the project (see Table 2). Data on specific subscales of Tennessee appear in Appendices Q, R, and S.
- Friendship Choices. While the results of the self concept data for students without disabilities lack dramatic changes (see above), the results of friendship choices reflect significant changes. Pre to post comparisons of students without disabilities' choices show significant increases, t (38) = 2.90, $p < .006$. Six months after the project, students were choosing their peers with disabilities at an even higher rate. A pre to second post comparison indicates overall project effectiveness in increasing their choices, t (30) = 2.16, $p < .04$.

Students without Disabilities Who Did Not Participate in Project. Students without disabilities who were not part of the project were tested on PATHS but because of difficulty in assessing these students and monitoring their testing, they were not tested on the Tennessee measure or on friendship choices.

- Total PATHS. Students without disabilities who did not participate in the project provided a "control" or

comparison point for project students. In terms of their own retention of levels on PATHS, there were no changes that reached significance. (See Appendix T)

Summary of Quantitative Results

The overall effectiveness of the project was shown to be highly significant in terms of attitudes toward students with disabilities. A comparison of project and nonproject students, both immediately after Discover Interdependence Week and six months after the week, showed much more positive attitudes on the part of project students.

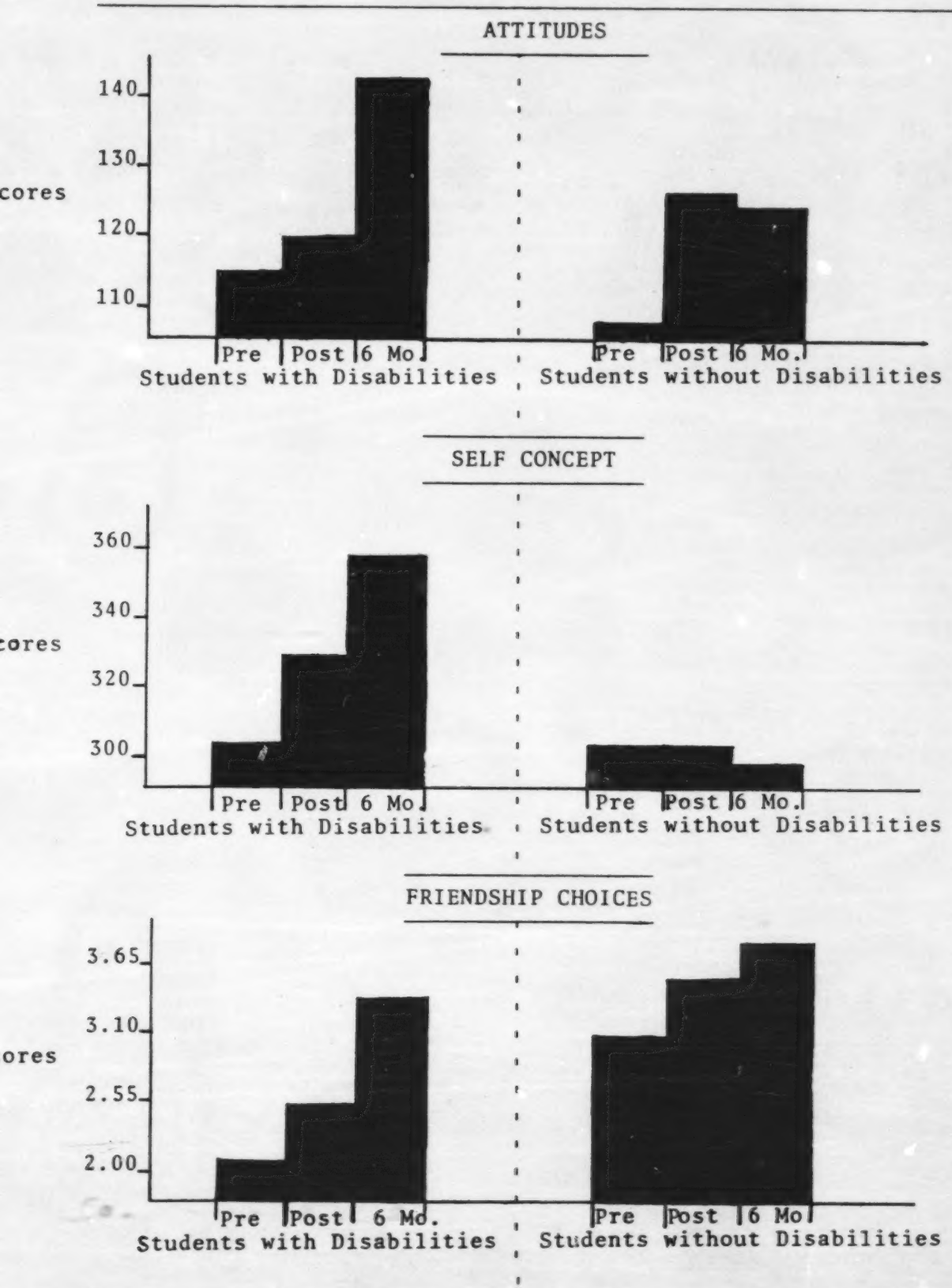
Students with disabilities proceeded along a consistent upward curve on attitudes, as measured by PATHS, self concept, and friendship choices over the course of the evaluation (see Figure 1). All of their increases reached significance when pre scores were compared to final scores.

Students without disabilities who participated in the project steadily increased their attitudes in a positive direction throughout the evaluation (see Figure 1). Both immediate and longitudinal comparisons were significant on PATHS. This group also demonstrated highly significant changes in friendship choices from the beginning of the project to six months after Discover Interdependence Week.

Taken together, these results can be interpreted as representing a highly effective and positive project. Both students with disabilities and students without disabilities

Figure 1

Changes in Attitudes, Self Concept, and Friendship Choices as a Result of the Project for Students with Disabilities and Students without Disabilities



underwent substantial changes in their willingness to accept students with disabilities and their actual choices of including students with disabilities into their social activities. An additional positive project outcome was that students with disabilities came away from the project experience feeling much better about themselves.

The Subjective Impressions of Project Participants, School Anchors and Participants' Parents

Project participants indicated that they learned a great deal about themselves, persons with disabilities, and cooperation among all people. They felt they had increased their respect for people. All participants believed that the experience improved their attitudes toward persons with disabilities. Many of the participants indicated they made friends at Discover Interdependence and have kept in contact with them. Project participants listed problems in starting activities in their school, such as insufficient time and conflicting schedules. Finally, they indicated several ways the Project Interdependence staff could assist them (see Appendix U for a complete set of responses from project participants).

School anchors believed that the project had improved their perception of the students who had participated. Anchors felt more trusting and patient with students. They indicated that the project was an effective medium for changing the attitudes and behaviors of regular and special education students and teachers. Finally they offered some suggestions for improving the

project (see Appendix V for a complete set of responses from anchors).

Parents of project participants indicated that they observed a positive change in their child. Parents believed that their child was more outgoing, confident and aware of persons with disabilities. They felt the project was an extremely valuable experience for their child (see Appendix W for a complete set of responses from parents).

School Site Projects

When project participants returned to their schools, many wrote articles on the project for their school and local newspapers. They formed Project Interdependence clubs and met on a weekly or monthly basis to plan further activities. A few schools observed a lack of physical accessibility to their campus and lobbied for ramps, curb cuts, and accessible bathrooms. Some schools had Disability Awareness Days when project students developed activities for other students to improve their attitudes toward persons with special needs. Project students gave presentations to numerous classes in their schools and showed a videotape on Project Interdependence (see Appendix X for a list of student activities in project schools).

Discussion

The results of this evaluation are extremely positive regarding the effectiveness of Project Interdependence in changing attitudes, self concept, and friendship patterns. Project students demonstrated more positive attitudes toward students with disabilities than did nonproject students, both

immediately following Discover Interdependence Week, and six months thereafter. Pretest to second posttest comparisons showed significant positive improvement on the part of project participants with disabilities across all three quantitative measures: attitudes, self concept, friendship patterns. Similarly, six months following Discover Interdependence Week, project participants without disabilities still show significantly improved attitudes toward students with disabilities and still indicated willingness to select students with disabilities as friends.

Many of the school site projects were effective in illustrating project goals to other students. More communication between project schools, increased administrative support for the school site projects, and better descriptions of commitments expected of the anchors and students may have increased the quantity and quality of the school site projects.

The first year outcomes described in this report suggest that Project Interdependence is a successful approach for assisting in the social acceptance and physical integration of students with disabilities. With the primary purpose of Project Interdependence being replication and expansion, it is crucial that a clearly defined and experimentally validated model be developed. Research is needed to identify which components of the overall Project Interdependence experience contribute most to attitude change. Which components are unnecessary or contradictory (some mean scores decreased after

participation at Discover Interdependence Week)? What types of students are the most amenable to change? What types are the least? What is the role of teachers and what is the effect of their attitudes on students' attitudes? What is the role of parents and what is the effect of their attitudes on students' attitudes? Which students with disabilities demonstrate the most favorable attitude change, and which the least? What activities support the maintenance and generalization of effects and how should they be structured? Do effects generalize to other students in high schools that participate in Project Interdependence?

References

Bagley, M.T., & Greene, J. F. PATHS: Peer attitudes toward the handicapped scale. Austin, Texas: Pro-Ed, 1981.

Fitts, W.H. Tennessee self concept scale. Nashville, Tennessee: Counselor Recordings and Tests, 1965.

Appendix A

ANOVA Immediately after Discover Interdependence Week on PATHS Behavior

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects Group	1317.338	1	1317.338	24.871	.001
Explained	1317.338	1	1317.338	24.871	.001
Residual	5985.323	113	52.967		
Total	7302.661	114	64.058		

117 Cases were processed. Two cases (1.7%) were missing.

Appendix B

ANOVA Immediately after Discover Interdependence Week on PATHS Learning

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects Group	1588.560	1	1588.560	29.415	.001
Explained	1588.560	1	1588.560	29.415	.001
Residual	6102.484	113	54.004		
Total	7691.043	114	67.465		

117 Cases were processed. Two cases (1.7%) were missing.

Appendix C

ANCOVA Immediately after Discover Interdependence Week on PATHS Total

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Covariates * Pre Physical	25644.506	1	25644.506	66.661	.001
Main Effects Group	4195.877	1	4195.877	10.907	.001
Explained	29840.384	2	14920.192	38.784	.001
Residual	43855.736	114	384.699		
Total	73696.120	116	635.311		

155 Cases were processed. 38 Cases (24.5%) were missing.

* Pre physical PATHS was used as a covariate since differences were not found on this variable.

Appendix D

ANOVA Six Months after Discover Interdependence Week

on PATHS Physical

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects Group	1826.81	1	1826.81	36.40	.001
Explained	1826.81	1	1826.81	36.40	.001
Residual	5621.15	112	50.19		
Total	7447.97	113	65.91		

163 Cases were processed. 49 Cases (30.1%) were missing.

Appendix E

ANOVA Six Months after Discover Interdependence Week on PATHS Behavior

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects Group	3818.65	1	3818.65	71.87	.001
Explained	3818.65	1	3818.65	71.87	.001
Residual	5951.29	112	53.14		
Total	9769.94	113	86.46		

163 Cases were processed. 49 Cases (30.1%) were missing.

Appendix F

ANOVA Six Months after Discover Interdependence Week on PATHS Learning

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects Group	3316.93	1	3316.93	66.17	.001
Explained	3316.93	1	3316.93	66.17	.001
Residual	5614.59	112	50.13		
Total	8931.52	113	79.04		

163 Cases were processed. 49 Cases (30.1%) were missing.

Appendix G

ANOVA Six Months after Discover Interdependence Week

on PATHS Total

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif of F
Main Effects Group	24941.38	1	24941.38	78.36	.001
Explained	24941.38	1	24941.38	78.36	.001
Residual	35649.41	112	318.29		
Total	60590.78	113	536.20		

163 Cases were processed. 49 Cases (30.1%) were missing.

APPENDIX H

Students with Disabilities' Retention from Pre to Post on PATHS Subscales

Pairs	Mean	T Value	DF	Probability Level
Pre PATHS Physical	52	.55	19	.59
with Post PATHS Physical	50			
Pre PATHS Behavior	26	1.41	18	.18
with Post PATHS Behavior	29			
Pre PATHS Learning	40	1.01	18	.33
with Post PATHS Learning	42			
Pre PATHS Total	115	.94	18	.36
with Post PATHS Total	120			

APPENDIX I

Students with Disabilities' Retention from

Post to Second Post on PATHS Subscales

Pairs	Mean	T Value	DF	Probability Level
Post PATHS Physical with Second Post PATHS Physical	52 56	2.96	27	.006*
Post PATHS Behavior with Second Post PATHS Behavior	27 37	5.74	27	.000*
Post PATHS Learning with Second Post PATHS Learning	41 48	5.80	27	.000*
Post PATHS Total with Second Post PATHS Total	120 140	6.32	27	.000*

*Denotes statistically significant finding

APPENDIX J

Students with Disabilities' Retention from

Pre to Second Post on PATHS Subscales

Pairs	Mean	T Value	DF	Probability Level
Pre PATHS Physical with Second Post PATHS Physical	51 56	2.50	13	.03*
Pre PATHS Behavior with Second Post PATHS Behavior	26 39	5.32	13	.000*
Pre PATHS Learning with Second Post PATHS Learning	41 49	3.77	13	.002*
Pre PATHS Total with Second Post PATHS Total	116 144	5.10	13	.000*

*Denotes statistically significant finding

APPENDIX K

Students with Disabilities' Retention from

Pre to Post on Tennessee Self Concept Subscales

Pairs	Mean	T Value	DF	Probability Level
Pre Tennessee Identity	82			
with		1.60	17	.13
Post Tennessee Identity	85			
Pre Tennessee Satisfaction	97			
with		1.54	17	.14
Post Tennessee Satisfaction	103			
Pre Tennessee Self Criticism	29			
with		2.10	17	.05*
Post Tennessee Self Criticism	31			
Pre Tennessee Behavior	91			
with		1.52	17	.15
Post Tennessee Behavior	95			
Pre Tennessee Self Concept	304			
with		1.46	17	.16
Post Tennessee Self Concept	315			

*Denotes statistically significant finding

APPENDIX L

Students with Disabilities' Retention from

Post to Second Post on Tennessee Self Concept Subscales

Pairs	Mean	T-Value	DF	Probability Level
Post Tennessee Identity with Second Post Tennessee Identity	87 101	3.49	29	.002*
Post Tennessee Satisfaction with Second Post Tennessee Satisfaction	105 122	4.83	29	.000*
Post Tennessee Self Criticism with Second Post Tennessee Self Criticism	33 35	2.21	29	.04*
Post Tennessee Behavior with Second Post Tennessee Behavior	95 109	3.53	29	.001*
Post Tennessee Self Concept with Second Post Tennessee Self Concept	329 358	2.31	29	.03*

*Denotes statistically significant finding

APPENDIX M

Students with Disabilities' Retention from

Pre to Second Post on Tennessee Self Concept Subscales

Pairs	Mean	T Value	DF	Probability Level
Pre Tennessee Identity with Second Post Tennessee Identity	82 97	2.45	14	.03*
Pre Tennessee Satisfaction with Second Post Tennessee Satisfaction	95 120	3.97	14	.001*
Pre Tennessee Self Criticism with Second Post Tennessee Self Criticism	30 35	2.20	14	.05*
Pre Tennessee Behavior with Second Post Tennessee Behavior	90 104	2.83	14	.01*
Pre Tennessee Self Concept with Second Post Tennessee Self Concept	303 348	3.19	14	.007*

*Denotes statistically significant finding

APPENDIX N

Project Students without Disabilities' Retention from Pre to Post on PATHS Subscales

Pairs	Mean	T Value	DF	Probability Level
Pre PATHS Physical	52			
with		.91	20	.37
Post PATHS Physical	53			
Pre PATHS Behavior	22			
with		4.43	20	.0001*
Post PATHS Behavior	30			
Pre PATHS Learning	34			
with		6.75	20	.0001*
Post PATHS Learning	44			
Pre PATHS Total	108			
with		6.24	20	.0001*
Post PATHS Total	128			

*Denotes statistically significant finding

APPENDIX O

Project Students without Disabilities' Retention from Post to Second Post on PATHS Subscales

Pairs	Mean	T Value	DF	Probability Level
Post PATHS Physical	55			
with		.87	29	.39
Second Post PATHS Physical	54			
Post PATHS Behavior	29			
with		.56	29	.58
Second Post PATHS Behavior	28			
Post PATHS Learning	44			
with		.62	29	.54
Second Post PATHS Learning	43			
Post PATHS Total	128			
with		.67	29	.51
Second Post PATHS Total	125			

APPENDIX P

Project Students without Disabilities' Retention from Pre to Second Post on PATHS Subscales

Pairs	Mean	T Value	DF	Probability Level
Pre PATHS Physical with Second Post PATHS Physical	52 53	-52	16	.61
Pre PATHS Behavior with Second Post PATHS Behavior	22 29	3.48	16	.003*
Pre PATHS Learning with Second Post PATHS Learning	34 42	3.89	16	.001*
Pre PATHS Total with Second Post PATHS Total	108 123	3.39	16	.004*

*Denotes statistically significant finding

APPENDIX Q

Project Students without Disabilities' Retention from Pre to Post on Tennessee Self Concept Subscales

Pairs	Mean	T Value	DF	Probability Level
Pre Tennessee Identity	85			
with		.04	16	.97
Post Tennessee Identity	85			
Pre Tennessee Satisfaction	91			
with		.59	16	.57
Post Tennessee Satisfaction	90			
Pre Tennessee Self Criticism	34			
with		.78	16	.45
Post Tennessee Self Criticism	35			
Pre Tennessee Behavior	92			
with		1.07	16	.30
Post Tennessee Behavior	91			
Pre Tennessee Self Concept	302			
with		.11	16	.91
Post Tennessee Self Concept	302			

APPENDIX R

Project Students without Disabilities' Retention from Post to Second Post on Tennessee Self Concept Subscales

Pairs	Mean	T Value	DF	Probability Level
Post Tennessee Identity	85			
with		1.33	29	.20
Second Post Tennessee Identity	83			
Post Tennessee Satisfaction	92			
with		1.21	29	.23
Second Post Tennessee Satisfaction	88			
Post Tennessee Self Criticism	34			
with		.47	29	.64
Second Post Tennessee Self Criticism	34			
Post Tennessee Behavior	90			
with		.33	29	.75
Second Post Tennessee Behavior	90			
Post Tennessee Self Concept	301			
with		1.05	29	.30
Second Post Tennessee Self Concept	292			

APPENDIX S

Project Students without Disabilities' Retention from Pre to Second Post on Tennessee Self Concept Subscales

Pairs	Mean	T Value	DF	Probability Level
Pre Tennessee Identity with Second Post Tennessee Identity	84 83	1.05	12	.31
Pre Tennessee Satisfaction with Second Post Tennessee Satisfaction	92 90	.78	12	.45
Pre Tennessee Self Criticism with Second Post Tennessee Self Criticism	35 33	.83	12	.42
Pre Tennessee Behavior with Second Post Tennessee Behavior	92 90	1.33	12	.21
Pre Tennessee Self Concept with Second Post Tennessee Self Concept	303 296	1.54	12	.15

APPENDIX T

Nonproject Students without Disabilities' Retention from Post to Second Post on PATHS Subscales

Pairs	Mean	T Value	DF	Probability Level
Post PATHS Physical	45			
with		.87	53	.39
Second Post PATHS Physical	47			
Post PATHS Behavior	20			
with		1.39	54	.17
Second Post PATHS Behavior	21			
Post PATHS Learning	33			
with		1.40	54	.17
Second Post PATHS Learning	35			
Post PATHS Total	109			
with		.66	54	.51
Second Post PATHS Total	103			

Appendix U

Project Interdependence

Participant Questionnaire

1. WHAT DID YOU GET FROM DISCOVER INTERDEPENDENCE WEEK?

I received from Discover Interdependence week both experience and understanding and how to express them in terms of impowerment. Impowerment is then what I received from camp.

I learned about people's disabilities and learned to love people I had never met before.

I had the time of my life at PI! I became closer to people and I learned a lot of respect. I care a lot for the disabled; to me they are just as capable like any one else.

I personally received much knowledge and awareness of the social barriers society sets and how they are not the only way of seeing things. They can be changed by plain ol' people who have the courage to change.

I felt more independent than I ever have because it was my first trip on my own without my family. I met so many new people and was able to make friends with all of them. I visited places I had never seen before and enjoyed the entire trip.

I got the knowledge it takes to realize that you can get along with anyone, despite race and physical or mental limitations, and the motivation to go out help make things better for <u>everyone</u> not just people with disabilities.

Finding disabled friend, and finding out how it feels to be disabled.

I made about 60 good friends and write to a couple of them to keep informed on how their schools are doing. The most important thing I gained was experience with the disabled. Until camp I didn't even know the special-ed kids at my own school! I met the msot wonderful people. A lot of serious information was passed on to us and I took a lot of it in.

I was able to speak in front of crowds. And to learn to respect other people.

A much better understanding of myself, and who and what I am. I feel I know about disabilities.

A new attitude towards Handicapped people. I was frightened of them. It did me a world of good.

A whole new outlook on life. Found friendship. Can accept my disability better.

Learning to do things together and also in our family groups.

I learned that everyone has something to offer, no matter what the "disability." Being disabled myself it was a good experience for me to interact with the able-bodied population.

I got to meet very nice people who showed me that there is more to people than just disabilities.

I learned a lot about disabled people and learned about how other people feel and helping each other.

2. DID YOU CHANGE YOUR BEHAVIOR (IN TERMS OF FAMILY, FRIENDS, SCHOOL, ATTITUDES, SKILLS) AS A RESULT OF THE WEEK?
YES 14 NO 2 IF YES, DESCRIBE:

I feel that I have changed in all of the above but however, in terms of my attitude towards my friends, family and school, I feel that it has changed my behavior greatly.

I now understand about people's disabilities and try to make my family and friends understand.

Yes, because I've become more involved at school with the disabled I don't feel as scared. No, because I've always cared for people very much.

I now feel more able to cope with problems because they are only as bad as I think they are. I can talk to people in large groups a little easier. I can communicate better on a one to one basis with persons not in my immediate peer group.

It didn't change my behavior towards my family, friends or classmates because I've always gotten along pretty well with them, but it changed my attitude towards people in wheelchairs because I never knew now many things they can actually do, and I do now.

Before it I felt something needed to be done to help someone with a disability I would think about it and want to help, but I was never motivated enough, but now I have people backing me up, people with the same wants and desires I have. I'm not as afraid to speak my mind because I know I have people that care as much as I do backing me.

Changing attitude towards other people by being friendlier.

I tried to behave as I did at camp and it worked for a couple of weeks. Now the only change is I have a totally new view of the disabled, I give them just as much a chance as anyone else when I meet he/she.

I learned to understand and compromise. I know I am a much better understanding person for it.

I am more open, more involved with the handicapped kids at our school.

I had a better understanding of other people's needs.

Helping my friends when they need help.

I had somewhat better understandings of how my peers felt on issues when raised during that week and that gave me a better insight as to how to relate to friends back home that were my age.

I felt that I was not myself. I gave more respect and appreciation to family and friends. I also found how easy it was to stand up and talk in front of a large group of people without being terrified.

3. WHAT WERE SOME OF YOUR EXPECTATIONS, WHILE YOU WERE AT DISCOVER INTER-DEPENDENCE WEEK AT LA HONDA, ABOUT WHAT YOU COULD ACCOMPLISH ONCE YOU RETURNED TO YOUR SCHOOL?

Some of our expectations or goals upon our return were that of addressing our school board, being interviewed on radio (these are now complete), and holding a disability awareness day both in the community and at our school.

I thought we could get people to understand disabilities by way of experience and by word of mouth.

More participation from disabled for them to get involved in school activities, and to have them get out in the open.

I hoped that as soon as we returned, we could start on seminar material and begin our public awareness program.

While I was at La Honda I believed that as a group people connected with Discover Interdependence could improve things at school for handicapped students.

I really didn't know what to expect when I got back to school. I didn't think there was much for us to do.

To help others to discover disabled people, and make them realize that disabled people are just like us.

I expected we would immediately go home and get people to back us, start large community projects and take up the whole school newspaper with out ideas. I was wrong, but not completely. We have done a few of the important things for the kids at our school.

Well, I wanted to get back to school and tell everyone but it didn't turn out like that.

I had at first wasn't sure, I know now. We can do anything we set as a goal.

At first they were not all that good, but towards the end of the week I was looking forward to the club and all the activities and fund-raisers.

I found out that we are no different than people without disabilities.

Helping the handicapped when they are in a tight spot.

I knew that this would be a good time for me to learn how I as a disabled person could better relate the success story of the interaction of two groups of people who thought they were strange to each other but learned to help each other when we needed it.

It would be easy to accomplish a lot of things when we get out. And when we show the movies we made when we were at La Honda.

I expected to learn about different things and I also expected to learn these things at camp to bring back all the information I have learned and tell everyone at school, family, etc. about disabled people.

4. DID YOU REVISE YOUR EXPECTATIONS AFTER YOU RETURNED TO YOUR SCHOOL?
YES 13 NO 2

I marked yes even though some of our plans have not been changed. But shortly, we will be making necessary revision to make our projects successful.

Most people who did not participate in the project don't understand by just word of mouth so now I am working towards letting them experience.

Now all of us get along very well. We talk with them and they get along with us and our friends more freely.

Our group anchor was almost transferred to another school and the majority of our members had a lot going on. Christmas was near and there was shopping to be done, plays to be rehearsed.

No, I was still excited and still believed everything we planned could be done.

Now I expect that our little school group will get the community aware of the fact that people with disabilities are the same as everyone else. They just need a little extra help doing certain things.

I made them realize that we are no different than people who can't walk or have a physical problem.

I realized it couldn't all be done in a week.

I explained to some of my friends and some were interested.

After I got back I saw how busy everyone was and knew it would be harder to get them involved too. But I managed.

Helping the people who worked inside.

I learned that even though the week lived up to my expectations, a lot of follow-up work had to be done. It is fun but sometimes difficult.

I gave a speech to my English class at Richmond High School. Some people took it very seriously and others thought I was nuts but I didn't because I was proud of what I did.

5. HAVE ANY OF YOUR OCCUPATIONAL, VOCATIONAL, OR PERSONAL GOALS CHANGED AS A RESULT OF PROJECT INTERDEPENDENCE?

As a student, my personal goals have not changed but because of Project Interdependence, I have gained more confidence to achieve my goals.

The only real thing that has changed is a personal goal to help people understand about disabilities.

Yes, at PI I could do it over and over, I loved to be with all the people I was with at La Honda. I was thinking of the Air Force, but now I want to get more involved with the project and I plan on it.

Not really. My occupational goals has been, for the past two years, to become a professional psychologist. Because the project had a lot of excellent psychological values, it only stimulated me more to become a psychologist.

If I can't be a peace officer, like I've always wanted to be, I'd like to work as a nurse or nurse's aide helping handicapped people.

For five years I've wanted to be a physical therapist, but now I'm considering becoming a teacher for LD or EH students also.

Not really, but I would like to work with disabled people.

No. I haven't changed my career goals. I have changed my outlook totally and have made it a goal to be helpful in PI as much as possible.

Well, I want to be a pharmacist and it hasn't changed at all.

Very much. I feel I know how to do <u>with</u> disabilities instead of do <u>for</u>.

Yes, it has interfered with my job a little.

Improved my outlook toward my vocation. It showed me I could work hard and be what I want to be.

No.

Not really; I still have many of the same goals as before. It is the way that I approach them that has changed. I want to be a writer, I could write about the interaction of people for what they want and its importance.

We have not accomplished anything yet but we are planning an idea that will bring more people in to believing in Interdependence.

No, not really.

6. WHAT PERSONAL THINGS HAVE YOU DONE AS A RESULT OF PROJECT INTERDEPENDENCE?

I now have more courage to help another disabled person and to cope with some of the remarks said by others.

I have talked to my family and friends about disabilities and am now more willing to help persons who have disabilities when needed.

I don't feel as scared as I was to be with the disabled and to talk to them; I make sure that I keep in touch with what's going on around for the disabled.

I have made a lot of friends, whom, if I had not been a part of Project Interdependence, I would not have met. We keep in touch and I visit those that live near me.

I have been more interested in school. I have been selected to represent the Special Education Department at California High School on the American Heritage tour to Washington D.C. and New York City.

I've gotten a local Rotary Club to sponsor us (facility wise) if we need to hold fund raisers and also I've changed the minds of many of my friends and a few members of my family. They are now more aware of what is wrong in this city (concerning the disabled) and are willing to help all they can.

I have told my family about Project Interdependence and what it means to me. I'm very proud to be a part of the family of Project Interdependence.

I've helped friends to be interested in spreading the news and participated in all our meetings and activities.

I haven't done anything.

I recognize my fellow students and feel much more at ease with disabled people, and hope disabled people feel at ease with me.

Gotten a hold of a lot of people to ask what they are doing at their school, and what they are doing.

By understanding my fellow more better.

Outgoing, friends.

I have helped start a club at school. The purpose of the club is to let other people know what interdependence is to all of us and how much fun it can be for everyone.

I have started to take life more seriously and tried to set good examples for littler ones.

I told all of my friends about the camp and everything. They were really interested about it and would like to try it.

7. WHAT GROUP ACTIVITIES OR PROJECTS HAVE BEEN INITIATED AT YOUR SCHOOL AS A RESULT OF DISCOVER INTERDEPENDENCE WEEK?

We have had a radio interview, address the school board and had a disability awareness day in a shopping center to educate the public in general.

Our group has published articles in the school paper and in the process of get a day for student to experience disabilities.

We have started a PI club. More people are getting involved and now there's more participation from everyone since PI.

We have started a Club Interdependence on our school campus. Our seminar will probably begin the first week in March.

Our school installed ramps in the parking lot so students in wheelchairs can have better access to the campus and the aisles in the cafeteria snack shack and bathrooms were widened.

Our small group has scheduled some public activities to get the community aware of disabilities. We are also in the process of putting together a presentation for the school board in hopes to get funds to pay for school improvement such as ramp, amplifiers for phones and other special equipment that one would need to make school life easier for a disabled student.

We really haven't done a lot because of students getting their new classes. But we have planned on having a fair and some other things.

We've had a bake sale. We're having a wheelchair basketball game in March and are planning to have a slide show assembly showing what camp was all about.

None.

Disability Month. Every Wednesday we have students for one month try to see and understand what a disability feels like.

I have been drafting people into the club and writing our constitution.

Disability Awareness Day.

Talked about planning things to do at our school.

We all have a lot of good ideas. Because of this any projects are still being talked about at this time.

We now have a club at school called Club Interdependence and we have meetings.

I don't really know, I moved to San Diego.

8. WHAT ARE SOME OF THE PROBLEMS YOU ARE HAVING IN STARTING PROJECT INTERDEPENDENCE ACTIVITIES AT YOUR SCHOOL?

Participation may be a problem but however, just recently we have had several volunteers to help us in our projects. At this time I find no problems.

The biggest problem will be to get the okay for any activities by school officials.

Not enough meetings. We need to get together more often and we need more publicity, and we have a lot of trouble with the press.

We are in need of press packets for publicity. We have potential sponsors who would like to know what we are all about before they support us.

We are having a wheelchair basketball game. We are having trouble getting enough wheelchairs to make up a team although we have enough volunteers.

Financial support and people that don't know about disabilities and that don't care to know about them. It's a big setback because it's hard to make people aware when their minds are closed and there's no way to get through.

Finding the right time. At the moment our school, Dos Pueblos, is very busy with students getting their new classes.

Not enough interest by the other students and explaining what we're trying to do.

No one can get together at the meetings, and when they do they're unorganized.

Not enough communication.

Time, publicity.

No problems so far.

Learning how to do things very slowly.

The problem is everybody is excited about the Project Interdependence but we're sort of mixed up about what is the best way to go about it. We are trying.

Some of the participants are not wanting to participate. We are also not getting enough people to listen to us.

Well, we really want Musign to come to our school to perform for the kids. But it looks like it's going to be so hard to get them to our school and also it costs so much money.

9. WHAT ASSISTANCE CAN THE PROJECT INTERDEPENDENCE STAFF PROVIDE YOU TO ACCOMPLISH YOUR PERSONAL OR GROUP GOALS?

At this time, we have all of the material necessary. But if we need any further assistance we will notify you.

The staff might help by talking to school officials if needed and just be there.

Keep this project going and I'm a Junior and I want to stay with this project if possible. Thank you!

As expressed previously, we are in need of press packets, brochures, informational materials for our seminar. We also need the video-tape of Discover Independence week.

Let us know that you are still interested in our group. We want to do things but we don't know how to start.

Just be there to listen and to give us some suggestions if we're at our rope's end. There's not much else they can do because it's our project and it's us that have to achieve our goals. We all need help now and then but we are the ones that have to make the difference and we can't do that if someone else does the work for us.

I will be a senior and I have been told that I will not be able to go to the next seven year's camp and they will be picking new schools. I would very much like to go next year and a lot of Project Interdependence kids would too. We are a part of the family of Project Interdependence and that makes me very lucky.

If someone could come over for a few days and direct us on getting sponsors instead of just telling us what to do. I don't have any experience in clubs being sponsored and I'd like someone to "hold my hand" as it were, through the process of getting a community club to back us.

I don't know.

Keep in touch and hopefully hold another conference soon.

Publicity from our local newspaper.

Equipment, suggestions, guidance, leadership.

Getting the job done.

Just be being there for the great week. It was one of my best times. Let's do it again real soon, please!! I don't want this thing to just die off like some of the world's other good ideas did. Let's all keep going with Project Interdependence!

To tell you the truth (nothing). Our job now is to carry out for other people what Project Interdependence carried out to us.

I guess to try and help us with getting Musign to our school.

Appendix V

Project Interdependence

Summary of Anchorperson Evaluations

1. HAS YOUR PERCEPTION OF THE STUDENTS WHO PARTICIPATED IN PROJECT INTERDEPENDENCE CHANGED? YES 7 NO 0
(IF YES, HOW? YOU MAY DESCRIBE SPECIFIC STUDENTS.)

Summary of "YES" answers:

I accept students in wheelchairs more easily.

Already sensitive young people have become more open with their expressions of love and caring.

One student had seemed a rather squirrly type but has come through a fairly good leader. I really hadn't known any of them before the trip.

I feel closer to them. I see them now beyond their role of "student."

At this point of the school year, I had a "down" feeling towards students in general. I saw at PI a great wealth of youth all working for a common goal. Super experience.

I saw more similarities in the two groups of students than I thought originally.

Students, when given the opportunity, are able to display genuine concern for others. Also, they can prove to be quite participative within a relevant context.

2. DO YOU PERCEIVE YOURSELF DIFFERENTLY NOW THAN BEFORE THE WEEK?
YES 5 NO 2
IF YES, HOW?

Summary of "YES" answers:

I perceive myself as being important in a statewide project. I also perceive myself as just about having bitten off more than I can chew in terms of keeping the Project alive and well at my school.

I am more attuned and aware of the disabled than before. I am really amazed at something I learned. That is that the Voc. Rehab. people do not consider disabled persons holistically. They all told me they are not at all concerned with their educational program, that that is the schools problem and they have little empathy or concern for the learning disability persons.

I see myself as a shy person, often moving too fast to give attention to others.

Probably a little more patient!!

I have developed a greater sense of trust in the younger generation to become involved in a project and to assist in its development.

3. DID YOU CHANGE ANY OF YOUR BEHAVIORS TOWARD ANY OF THE STUDENTS WHO ACCOMPANIED YOU ON PROJECT INTERDEPENDENCE?

YES 6 NO 1

IF YES, NOW?

Summary of "YES" answers:

I accept and understand much more about the boy who is in a wheelchair that went with us.

I am also aware of some of the condescending approaches I had.

I feel more confident in confronting these students, in sharing with them.

I saw "adult actions" in two of the non-special education students that made me really feel their worth in the project.

Probably less condescending.

I have learned to "let go" as far as allowing students to show that they can be responsible.

4. WITH REGARD TO PERSONS WITH SPECIAL NEEDS, WAS THE WEEKLONG TRAINING EXPERIENCE AN EFFECTIVE MEDIUM FOR CHANGING THE ATTITUDES AND BEHAVIORS OF:

REGULAR EDUCATION STUDENTS?	YES 7	NO 0
SPECIAL EDUCATION STUDENTS?	YES 7	NO 0
YOURSELF?	YES 7	NO 0

5. WOULD YOU LIKE THIS EXPERIENCE TO BE REPEATED?
YES 7 NO 0

6. IN WHAT WAYS WOULD YOU MODIFY THE EXPERIENCE AND PROJECT INTERDEPENDENCE?

I think the anchorpersons should be made aware of the amount of time and effort to be expended during the project week as well as afterwards. I did not have enough time to myself there, what with sleeping in the noisy girls' dorm. The week was strenuous to me, and I could have done a better job, if I had been properly rested. I got too little sleep.

Inclusion of Blacks as organizers and facilitaters.

There are some organizational details that need attention: there needed to be a designated trouble shooter or expediter, the facilitators who have no recent contact with high school students should room in the cabins too, Project Directors too; the sessions were too long for most students; not enough free time for personal things, nights were too late; more time is needed for both work and school groups, the Anchor people needed to meet with the staff more often; registration needs improving, early orientation meeting for all adults; more lead time to select students; more information for school people about what is expected; transportation should not be so crowded. As I read this over, most of my comments refer to the staff getting aware of who is there and understanding them; and communicating with them.

I feel the total group size should be smaller and more time allowed for rest/leisure.

Many little things arose, but on the whole, it was well planned. The weather wasn't the best, was it? The hills to the cabins made if difficult for wheelchairs.

Spread the activities over a longer period of time for maximum change. Schedule follow-up activities.

Include the Anchor persons on the planning and pre-conference activities, as well as, allow them to be co-facilitators.

7. DO YOU HAVE ANY OTHER COMMENTS OR SUGGESTIONS?

I enjoyed the experience in many different regards. I would have appreciated more direction and support from Project personnel, in terms of initial organization when we arrived, allocation of rooms (lack of wheelchair facilities, where they were needed, etc.), coordination with group facilitators.

The experience was very enriching.

If this is done again, the 1981 Anchors should be involved in the planning and operation of the next one. They could handle a number of the rough spots for the new groups and would be valuable as support persons for the facilitators. Attention should be addressed to the Learning Disabled person as well as the physically disabled. The LD is more difficult and has less chance of success. I am somewhat less cynical of some of the unrealistic approaches the State persons have. I used to be more of a dreamer and less of a realist. The use of Disabled Persons in the evening entertainment was great, also the ropes and aikido were super.

I feel the project was a tremendous success. The samll groups facilitated a closeness and intimacy which changed each of us.

The pre and post tests were administered at very hectic times. There has to be a separation of registration and testing (in the same room.) Super conference, workshop, convention, etc. Looking forward to PI II.

There was not enough time allowed for me to recruit the kind of students who demonstrate the quality of leadership that is necessary to make this project work.

Appendix W

PROJECT INTERDEPENDENCE

Parent Questionnaire Summary

1. HAVE YOU SEEN A CHANGE IN YOUR SON OR DAUGHTER AS A RESULT OF HIS/HER PARTICIPATION IN PROJECT INTERDEPENDENCE?

   Yes: 10 No 0

2. WHAT EFFECTS DID PROJECT INTERDEPENDENCE HAVE ON YOUR SON OR DAUGHTER?

   My son has become more sensitive to the needs of the less fortunate.

   He is more assertive, shows an attitude indicating more self-worth, is more positive about his future, has more interest in taking part in group efforts to get the disabled their recognition. Is pacing himself at school in a way that makes him comfortable. He, in his senior year, is only now braving the experience of eating in the school cafeteria. Before this, he insisted on private dining.

   My son feels more confident about himself because of his unique experience. He met many different kinds of people and learned that he is equal to any of them. The richness of the program stimulated him towards wanting to achieve more long range goals involving teaching others about the problems of the disabled.

   She is more outgoing.

   It made her more aware of her capabilities. She is more willing to help others and she seems to feel very good about herself in this respect.

   She has a lot more self confidence. She is not so self critical. She is very aware of the concerns of people with disabilities and has done much to help them.

   Increased her awareness of handicapped persons as persons and her feeling of adequacy to help. She now takes a stand for issues (like the phone charge for deaf services). She wants to help and be more involved on a person-to-person basis (not into fund raising or organizing).

   She cares about somebody else feeling too. She doesn't like for another person to make fun of another that is less able to do things themselves.

   He is more tolerant of people with different abilities and characteristics. It has given him the courage to try new experiences.

   She has become much more aware of the similarities of disabled people. She is quicker to defend and less tolerant of "teasing" of disabled. She also points out places where handicap accesses can be made easier.

4. DO YOU HAVE ANY OTHER COMMENTS ABOUT PROJECT INTERDEPENDENCE?

A great idea. I hope more young people will be able to partake of this idea.

When he went to camp, he was apprehensive and concerned about what was going to happen (so was I). When Paul came home, it took him two weeks to come down out of the clouds. Tears fell down his cheeks when he related the joyous times and told about the wonderful people he had interacted with. I can truly say that it was the first time in Paul's life that I have ever seen him totally ecstatic. As a mother, it made me melt with joy for him.

It's a creative, dynamic approach to dealing with the problem of bringing different kinds of teens together for growth experiences. It can only enhance our society when people learn to work with each other. Including the disabled is a stroke of positive genius!! Money's tight, but programs like this should have top priority.

Annette enjoyed it and I feel she learned a lot.

We found it to be a very positive, rewarding experience for our daughter. It took the Project to demonstrate to our special child what we had been telling her for years. We thank you and encourage you to keep up the good work!

I think it is one of the most productive programs possible, and will really have a lot of impact on our society's way of looking at disabled people.

I was amazed by the ambitious scope of this project--but all for it. Besides being Liz's first association with handicapped, it was also one of the few social interracial opportunities she has had. Hooray!

I just want to thank everyone for what they did for my daughter. She has really come a long way and I am very proud of her and I know that she will do what she wants to become of her life. Thank you.

It is a super experience for the young people. I'm very thankful my son has had the experience of Project Interdependence.

I think this is a valuable project. Making a few more aware creates a new nucleus for changes. She has suggested many school and community changes and given her personal friends new insights.

Appendix X

Student Activities in Project Schools

California High School

- Bake sale for Project Interdependence
- Ramps and bathroom stall installed at high school
- Published articles in school paper
- Presentation of project tape to school classes

Compton High School

- Presentation to several classes on Project Interdependence
- Presentation to school administration and faculty

Dos Pueblos High School

- Three articles in school newspaper
- Two-day Disability Awareness Workshop
- Two-day presentations on project Interdependence to schools

El Rancho High School

- Showed film to one group of school administrators
- Article in newspaper

Encinal High School

- Published an article in local newsletter
- Participated in session at Lawrence Hall of Science Careers Fair
- Handicapped parking space put in at high school
- Musign assembly for entire school
- Presentations in leadership class on Project Interdependence themes

Foothill High School

- Presentation to leadership class of Project Interdependence
- Article in school newspaper
- Project participant elected to Vocational Industrial Clubs of America

Hilltop High School

- Presentations at local elementary school
- Disability/simulation Awareness Day at local shopping center
- School newspaper article on Project Interdependence
- Disability Awareness Day at high school

3. DID THE PROJECT ALTER THE RELATIONSHIP THAT YOU HAVE WITH YOUR SON OR DAUGHTER? IF YES, DESCRIBE.

3 YES 7 NO

I think that now he believes me when I say, "As long as your brain is in good working order, your body limitations shouldn't keep you from finding an independent future."

It made us much closer.

We share the things she was going to do and the place she was going to see. It was very interesting.

(Hilltop High School, continued)

- Announcements in bulletin
- School Board presentations to Community Advisory Council
- Radio station interview on Project Interdependence
- Special Arts Faire on Project Interdependence

Norte Vista

- Two group meetings
- Formed a Project Interdependence Club
- Article in school newspaper

Richmond High School

- Film presentation to six classes on Project Interdependence
- Field trip to Sugarloaf Ridge (Sonoma County) with project and nonproject students
- Participation in Lawrence Hall of Science Careers Fair

Simi High School

- New Games presentation to entire school
- Articles in local paper
- Presentation to School Board, Lions Club, Rotary Club, News show
- Formed Project Interdependence Club